

**Stroke and STEMI System Element Presentations**  
**March 18, 2008**

(🕒-Common Time Critical Element, ♥ - STEMI, 🧠 - Stroke)

Element	Presentation Assignee Group Leader	Presentation Time Allowed
<u>911-Emergency medical dispatch</u> 🕒 1) Statewide 911 access 2) Statewide emergency medical dispatch (EMD) 3) EMS dispatch protocols—dispatchers know Stroke-STEMI signs and symptoms  <i>What is statewide EMD coverage? Does this require regional 911 call centers?</i> <i>What should dispatchers do with this information?</i> <i>Who should oversee statewide EMD?</i> <i>Who should oversee statewide 911?</i> <i>Should we have statewide call processing time parameters?</i>	Jerry Kirchhoff 🧠 Salvador Cruz-Flores 🧠 Jason White Mark Alexander	5 minutes
<u>Response Coordination</u> 🕒 4) Stroke-STEMI considered life-threatening and triggers appropriate activation 5) Mutual aid agreements between neighboring service areas  <i>How can activation be triggered consistently?</i> <i>Who is activated when stroke-STEMI is identified?</i> <i>How will mutual aid agreements assure coverage for rural area?</i>		5 minutes
<u>Pre-hospital Response:</u> 🕒 6) Appropriate field equipment (e.g., 12-lead EKG) & data transmission to hospital ♥ 7) All EMS recognize stroke-STEMI and have consistent protocols—one triage protocol and assessment tool 8) Consistent, appropriate technology link between field and hospital 9) Field activation of cath lab / stroke team (at minimum call to ED from field) ♥ 10) Helicopter Early Launch Program (HELP) (DHSS Added)  <i>What criteria would be used for field activation?</i> <i>What are “consistent protocols” and how would they be established? Will “one” protocol and assessment tool be sufficient?</i> <i>Is field triage an explicit component of this recommendation?</i> <i>What is the difference between data transmission and technology link?</i> <i>Should field activation be mandated?</i> <i>Should HELP be included in the recommendation for the TCD system for stroke and STEMI?</i>	Joan Drake Jason Lynch ♥ Ken Koch 🧠 Ruby Mehrer 🧠 Liz Deken ♥	10 minutes

Element	Presentation Assignee <b>Group Leader</b>	Presentation Time Allowed
<p><u>Transport protocol</u>, 🕒</p> <p>11) EMS to field site within designated time</p> <p>12) Transport protocol—</p> <ul style="list-style-type: none"> <li>a) Regionalize</li> <li>b) Push destination decision to field</li> <li>c) Protocol considers patient, location and ambient conditions</li> <li>d) Stroke symptom onset of 6-8 hours, then transport to nearest facility 🕒</li> <li>e) All EMS identify appropriate care centers for transport based on protocol/algorithm</li> <li>f) Support care</li> <li>g) Transport policy needs to inform/edit current ground or air decisions once designated centers exist</li> </ul> <p>13) Inter-hospital transfer agreements</p> <p><i>Do we need to have a designated response time?</i>  <i>How do you set up a designated response time? Is there data to support the value of this?</i>  <i>How should the transport protocol be developed to address items listed in 12?</i>  <i>Should regional transport protocols be established?</i>  <i>Is field triage an explicit component of this recommendation?</i>  <i>How do you minimize field triage mistakes (over/under activation)?</i>  <i>Is 6-8 hours documented in the literature as the appropriate cut-off mark for stroke center transport?</i>  <i>What is the cut-off mark for STEMI center transport?</i></p>	<p>Ken Koch 🕒</p> <p><b>Ruby Mehrer</b> 🕒</p> <p>Joan Drake ♥</p> <p>Taz Meyer ♥</p> <p>Terry Buddemeyer ♥</p>	<p>10 minutes</p>
<p><u>Hospital</u> 🕒</p> <p><b>STEMI</b></p> <p>14) ED physicians play key role in determining patient care &amp; destination ♥</p> <ul style="list-style-type: none"> <li>a) Cath lab</li> <li>b) Lytics</li> <li>c) Hospital destination decision</li> <li>d) Consistent training</li> </ul> <p><i>Who should activate a cath lab?</i>  <i>What is an acceptable over/under triage rate?</i>  <i>Who provides training? What does it consist of?</i>  <i>What is the time breakpoint for deciding between lytics and cath lab?</i>  <i>Is there a role for “drip and ship”? Is there a role for field lytics?</i></p>	<p><b>Dmitri Baklanov</b> ♥</p> <p>George Kichura ♥</p>	<p>5 minutes</p>

Element	Presentation Assignee Group Leader	Presentation Time Allowed
<p><u>Hospital-STEMI</u>, continued</p> <p>15) Hospital does not allow diversions</p> <p>16) All hospitals provide timely triage, treatment or referral for walk-ins</p> <p>17) Designated Centers- ♥</p> <p>a) Standards and designation process for different levels of care</p> <p>b) Explore research at highest level of STEMI center</p> <p>18) STEMI system gap analysis</p> <p>a) Plan to fill gaps</p> <p>b) Coordinate connectivity of critical access hospitals</p> <p>19) All hospitals have written plan &amp; transfer agreements that guide operations</p> <p>20) Transition back to referral facility and/or PCP after acute event</p> <p>21) Access to cardiologist</p> <p><i>What is the time breakpoint for deciding between lytics and cath lab?</i></p> <p><i>Is there a role for “drip and ship”? Is there a role for field lytics?</i></p> <p><i>Should there be a state mandated time standard for symptom onset to definitive care?</i></p> <p><i>If yes, what should it be?</i></p> <p><i>What percentage of the time should the hospital have to meet that standard?</i></p> <p><i>Has timely triage been defined for walk-ins?</i></p> <p><i>What are some general guidelines for the designation process?</i></p> <p><i>How should the Department gather input to inform the designation process?</i></p> <p><i>Should the Department mandate specific PCI protocols?</i></p> <p><i>E.g., suspected anatomical artery catheterization first, delayed arch study, direct field triage to the cath lab bypassing the ED?</i></p> <p><i>Should the Department mandate a specific percentage of D2B time less than 90 minutes?</i></p> <p><i>Who should be responsible for data entry into a STEMI registry?</i></p> <p><i>What elements should be in a registry?</i></p>	<p>Richard Bach ♥</p> <p>George Kichura ♥</p> <p>Linda Dean ♥</p> <p>Dmitri Baklanov ♥</p>	<p>20 minutes</p>

Element	Presentation Assignee <b>Group Leader</b>	Presentation Time Allowed
<p><b>Hospital-Stroke</b></p> <p>22) Hospital does not allow diversions</p> <p>23) All hospitals provide timely triage, treatment or referral for walk-ins</p> <p>24) Designated Centers 🗣️</p> <p>a) Standards and designation process for different levels of care</p> <p>b) Stroke research at highest level</p> <p>25) Statewide assessment of each hospital's stroke capacity</p> <p>a) Plan to fill gaps</p> <p>b) Coordinate connectivity of critical access hospitals</p> <p>26) All hospitals have written plan &amp; transfer agreements that guide operations</p> <p>27) Transition back to referral facility and/or PCP after acute event</p> <p>28) Access to neurologist</p> <p><i>Is there a role for "drip and ship"?</i></p> <p><i>Should there be a state mandated time standard for symptom onset to definitive care?</i></p> <p><i>If yes, what should it be?</i></p> <p><i>What percentage of the time should the hospital have to meet that standard?</i></p> <p><i>Has timely triage been defined for walk-ins?</i></p> <p><i>What are some general guidelines for the designation process?</i></p> <p><i>How should the Department gather input to inform the designation process?</i></p> <p><i>Should the Department mandate specific stroke treatment protocols? E.g., who qualifies for an IV thrombolytic, a Merci retriever or intra-arterial thrombolytic?</i></p> <p><i>Does hemorrhagic stroke need to be addressed in a TCD system?</i></p> <p><i>Should the Department mandate a specific percentage of stroke patients treated?</i></p> <p><i>Who should be responsible for data entry into a stroke registry?</i></p> <p><i>What elements should be in a registry?</i></p>	<p><b>Eddie Spain</b> 🗣️</p> <p>Carol Beal 🗣️</p> <p>Debby Sprandel 🗣️</p> <p>Salvador Cruz-Flores 🗣️</p> <p>Sondra Solomon 🗣️</p> <p>Kathryn Hedges 🗣️</p>	<p>20 minutes</p>
<p><b>Hospital-Stroke</b></p> <p>29) Telemedicine for neuro-assessment 🗣️</p> <p><i>What role does telemedicine need to play in the TCD system?</i></p> <p><i>How should this element be folded into the TCD system?</i></p> <p><i>How can neurologists be engaged in this process?</i></p> <p><i>How are state physician licensing, payment and liability</i></p>	<p>Pam Kelly 🗣️</p> <p>Jeremy Barnes 🗣️</p> <p>Barry Robbins 🗣️</p> <p><b>Salvador Cruz-Flores</b> 🗣️</p>	<p>5 minutes</p>

<i>issues managed with telemedicine?</i>		
<b>Element</b>	<b>Presentation Assignee Group Leader</b>	<b>Presentation Time Allowed</b>
<u>Hospital</u> 30) Maintain role of small community hospital in TCD system.	Randy McCullough ♥ 🗣️	5 minutes
<u>Quality Improvement System</u> ⌚ 31) Streamlined and coordinated data collection process supports TCD system and quality improvement <ul style="list-style-type: none"> <li>a) Feedback loop,</li> <li>b) Collection not redundant builds on existing data systems</li> <li>c) STEMI Registry ♥</li> <li>d) Stroke Registry 🗣️</li> <li>e) Allows QI data sharing within system without liability</li> </ul> <p> <i>How do we deal with the peer review protection issue?</i>  <i>Who should coordinate or perform the QI function at the TCD system level?</i>  <i>How should we benchmark data elements?</i>  <i>How can we ensure that the TCD data collection process is not redundant or result in extra layers of work?</i> </p>	Linda Brown ♥ Luann Pfau ♥ Bobby Olm-Shipman Debby Sprandel 🗣️	10 minutes
<u>Professional Education</u> ⌚ 32) EMS field providers training on assessment & triage protocols 33) Practitioners keep pace with evidence based practices <ul style="list-style-type: none"> <li>a. All staff have minimal competencies</li> <li>b. Training on protocols for stroke-STEMI care</li> </ul> 34) Basic Life Support (BLS) requirement: obtain 12-lead (not interpretation) ♥ <p> <i>What is the purpose of professional education regarding TCD?</i>  <i>Does anything need to be added to the current training networks and approaches to address TCD elements?</i>  <i>What is required to make 12-lead acquisition a BLS skill?</i>  <i>How is professional education going to use QI data to modify education programs?</i> </p>	Taz Meyer ♥ Scott Duff 🗣️ Liz Deken ♥	5 minutes

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Element	Presentation Assignee	Presentation Time Allowed
<u>Public Education</u> ⌚ 35) Understand Hospital Designated Levels of Care and when appropriate to use community vs. non-community hospital. 36) Informed patient –recognize signs & symptoms, call 911 37) Informed patient advocates—where to go for treatment (regular vs. referral hospital) 38) Support group with coordinated resources post events	Sondra Solomon 🗣️ Marianne Ronan 🗣️ Liz Deken 🗣️	5 minutes
<u>General</u> ⌚ 39) Consistent protocols to meet standards of care 40) Consistent terminology-between field & hospital 41) Integrated network for primary & specialty care	Linda Dean ♥️ Salvador Cruz-Flores 🗣️	5 minutes
42) Payer policy review to support right care 43) Insurance company outreach and education to provide coverage and reimbursement	Jim Waring ♥️	5 minutes
<u>System Administration/Oversight</u> ⌚ 44) Statutory and Regulatory Authority to implement TCD system 45) Establish oversight advisory council	Bill Jermyn ♥️ 🗣️	5 minutes